The giant sequoia is often referred to as the largest tree on earth. If you had been around 3,000 years ago, however, you could have held this entire tree on one of your fingers. Like most plants, the giant sequoia tree starts its life as a tiny seed. At one time, this gigantic tree was no bigger than your fingernail.
Seeds come in many different forms. Some seeds are large. Others are quite small. Some have a dainty, featherlike look, and others are wrapped in a protective cone.

Coconut

Mustard Seeds

Geranium Seeds
A seed has three main parts.

1) The *seed coat* is a protective covering around the outside of a seed. It is usually hard and tough, and its job is to protect the seed and keep it moist.

2) The *embryo* is the little baby plant. It has two different sides. One side grows into the stem and leaves, and the other side grows into the roots.

3) Food is also in the seed. The food keeps the embryo nourished until the plant is able to make its own food.
A seed keeps its embryo safe and moist until conditions are good for the baby plant to grow – or *germinate*. A growing seed needs the following:

1) Water – Seeds usually need enough water to moisten but not soak them.
2) Oxygen – Seeds need oxygen for energy until leaves develop. If they are too far underground, there may not be enough oxygen.
3) Temperature – Some seeds require just the right temperature to germinate. Many germinate when the temperature is 60-75° F, but some germinate at lower temperatures.
4) Light or darkness – Many seeds in forest settings will not germinate until the canopy allows enough light.
Some seeds help the baby plants by moving them to new locations. This is called seed dispersal.

Sunflowers drop their seeds straight to the ground.

Dandelions can be carried long distances by the wind.

Squirrels and blue jays scatter acorns around.

Coconuts can float to a new beach or island.

Seeds with burrs stick to animal fur.